

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in view of the present amendment and in light of the following discussion, is respectfully requested.

Claims 5, 7-13, and 16-22 are pending. Claim 21 was withdrawn by the outstanding Office Action. In the present amendment, Claims 5, 16, 17, 18, and 20 are amended, and Claim 22 is added. Support for the present amendment can be found in the original specification, for example, at page 8, line 8 to page 9, line 7 and in Figures 1 and 2. Thus, it is respectfully submitted that no new matter is added.

In the outstanding Office Action, Claims 5 and 20 were rejected under 35 U.S.C. §112, second paragraph; and Claims 5, 7, 8, 10-12, and 16-20 were rejected under 35 U.S.C. §102(b) as anticipated by Bottcher et al. (U.S. patent No. 4,390,745, hereinafter “Bottcher”).

Applicants would like to thank Examiner Patterson for the courtesy of the interview granted to Applicants’ representative on November 15, 2007. During the interview, Applicants’ representative noted that priority had not been acknowledged in the Office Action. Therefore, Applicants respectfully request that priority be acknowledged in a future Office communication. Additional arguments and amendments similar to the ones presented hereinafter were discussed during the interview.

In response to the outstanding rejection of Claim 5 under 35 U.S.C. §112, second paragraph, Claim 5 is amended to clarify that the innermost surface of the elastic sleeve is comprised of a first innermost surface of the internal semiconductive layer, a second innermost surface of the reinforced layer, and third innermost surfaces of the stress-relief cones, as suggested by Examiner Patterson during the interview. Additionally, the term “both sides” is deleted from Claim 5 and the term “corn” is deleted from Claim 20. In view of the amendments to Claims 5 and 20, it is believed that all pending claims are definite and no further rejection on that basis is anticipated. However, if the Examiner disagrees, the

Examiner is invited to telephone the undersigned who will be happy to work with the Examiner in a joint effort to derive mutually acceptable language.

Turning now to the outstanding rejection of the claims under 35 U.S.C. §102(b), this rejection is respectfully traversed, as discussed below.

Amended Claim 5 recites:

A cold-shrinkable elastic sleeve that is tube shaped, comprising:

an internal semiconductive layer that includes an elastic material and a semiconductive material, the internal semiconductive layer extending in a central portion in a longitudinal direction of a length of the sleeve and having a first innermost surface comprising a substantial part of an innermost surface of the sleeve;

a reinforced insulation layer that is formed at least around the internal semiconductive layer to reinforce the internal semiconductive layer and extends from ends of the internal semiconductive layer along the longitudinal direction of the sleeve;

an external semiconductive layer that includes an elastic material and a semiconductive material, the external semiconductive layer being molded around the reinforced insulation layer; and

two stress-relief cones, each not including the reinforced insulation layer, one stress-relief cone being formed at each end of the sleeve, each stress-relief cone at a distance from the internal semiconductive layer along the longitudinal direction of the sleeve as intervened by the reinforced insulation layer, each stress-relief cone having a partially covered surface that is partially covered by the reinforced insulation layer such that the partially covered surface includes a non-covered area closest to an end of the sleeve and not being covered by the reinforced insulation layer,

wherein the first innermost surface of the internal semiconductive layer, a second innermost surface of the reinforced insulation layer, and third innermost surfaces of the stress-relief cones comprise the innermost surface of the sleeve,

and ***the external semiconductive layer extends partially over an external surface of the reinforced insulation layer*** such that a length of the external semiconductive layer in the longitudinal direction of the sleeve is substantially the same as

a total length of both the innermost surface of the internal semiconductive layer and the second innermost surface of the reinforced insulation layer, ***the external semiconductive layer does not cover a substantial area of the external surface of the reinforced insulation layer, and the external semiconductive layer is an outermost layer of the sleeve and is shorter in the longitudinal direction than the reinforced insulation layer.***

As can be seen in Figure 1 of the original application, the external semiconductor layer is shorter in a longitudinal direction of the sleeve such that the external semiconductive layer does not extend to an end of the sleeve and does not cover the entire reinforced insulation layer or the stress-relief cone. As a result, the external semiconductive layer can be formed cylindrically around the reinforced insulation layer thinly and with a uniform thickness. As a result, the form of the external semiconductive layer is simplified.¹ Additionally, when the external semiconductive layer is molded around the reinforced insulation layer by injecting a semiconductive rubber into the mold, the flowing speed of a semiconductive rubber material can be kept uniform and the semiconductive rubber material flows well in the mold such that the control of the pressure on the semiconductive rubber is made simple.² Additionally, when cables having different diameters need to be connected, the cold-shrinkable elastic sleeve having the edge-cut section near each of the stress-relief cones (i.e., the external semiconductive layer does not extend over an entirety of the stress-relief cone in a longitudinal direction), it is not necessary to prepare a newly modified cold-shrinkable type rubber sleeve for each different diameter.³

Bottcher describes an enclosure for an electrical apparatus including an insulating layer 30 and a conductive layer 36 formed on an outside of the insulating layer 30.⁴ Additionally, Bottcher describes that the insulating layer 30 can be tapered to form a stress

¹ See the original specification, for example, at page 9, lines 20-25.

² See the original specification, for example, at page 10, lines 1-9.

³ See the original specification, for example, at page 10, line 16 to page 11, line 3.

⁴ See Bottcher, at column 10, lines 57-65 and in Figure 6.

cone at an end 32 of the cable shield, and that the stress cone ends at a position 34 which is longitudinally spaced from the cable shield.⁵

However, it is respectfully submitted that Bottcher does not disclose or suggest “two stress-relief cones, each not including the reinforced insulating layer, ... each stress-relief cone having a partially covered surface that is partially covered by the reinforced insulation layer such that the partially covered surface includes a non-covered area closest to an end of the sleeve and not being covered by the reinforced insulating layer,” as recited in amended Claim 5.

Instead, in the stress cone described in Bottcher, the stress cone is *entirely covered* by the conductive layer 36 as can be seen in Figures 6, 7, and 8. Thus, the stress cone described in Bottcher is not the claimed stress-relief cones.

Additionally, it is respectfully submitted that Bottcher does not disclose or suggest “the external semiconductive layer extends partially over an external surface of the reinforced insulation layer,” as recited in amended Claim 5.

Instead, as discussed during the interview, and as can be seen in Figures 6, 7, and 8 of Bottcher, the conductive layer 36 extends over an *entire length* of the external surface of the insulating layer 30. Additionally, as discussed during the interview, Claim 5 has been amended to clarify that the external semiconductive layer is the outermost layer of the sleeve.

Further, in view of the above discussion of Bottcher, it is also respectfully submitted that Bottcher does not disclose or suggest “the external semiconductive layer *does not cover* a substantial area of the external surface of the reinforced insulation layer, and the external semiconductive layer ... is *shorter in the longitudinal direction* than the reinforced insulation layer,” as recited in amended Claim 5.

⁵ See Bottcher, at column 10, line 66 to column 11, line 5 and in Figures 7 and 8.

Therefore, it is respectfully submitted that Bottcher does not disclose or suggest every feature recited in amended Claim 5. Thus, it is respectfully requested that the outstanding rejection of Claim 5, and all claims dependent thereon, as anticipated by Bottcher be withdrawn.

Independent Claims 16, 17, and 20, each recite “the external semiconductive layer being an outermost layer of the sleeve and being shorter in the longitudinal direction than the reinforced insulation layer.” As discussed above, and as can be seen in each of the figures of Bottcher, the conductive layer 36 is ***not shorter*** in the longitudinal direction than the insulating layer 30.

Further, Claim 16 recites “at least a portion of the part of the reinforced insulation layer that extends around each of the stress-relief cones in a direction of a length of the cold-shrinkable elastic sleeve is not covered by the external semiconductive layer to be exposed.” Claim 17 recites “two external insulation portions each being constituted by an end of an external portion of the sleeve which is free of the external semiconductive layer.” Claim 20 recites “two external insulation portions, each including an end of an external portion of the sleeve which is free of the external semiconductive layer.”

Therefore, in view of the above discussion of Bottcher, it is respectfully submitted that Bottcher does not disclose or suggest every feature recited in independent Claims 16, 17, or 20. Thus, it is respectfully requested that the outstanding rejections of Claims 16, 17, and 20, and all claims dependent thereon, as anticipated by Bottcher be withdrawn.

It is noted that Claim 18 is dependent on Claim 17, and therefore is patentable for at least the reasons discussed above with respect to Claim 17. Additionally, Claim 18 recites “the external semiconductive layer is absent in a region in the longitudinal direction between the end of the sleeve and a point on an inner periphery of the sleeve at which the reinforced insulation layer and the stress-relief cone contacts.” It is respectfully submitted that Bottcher

does not disclose or suggest such an external semiconductive layer. Therefore, it is respectfully submitted that Bottcher does not disclose or suggest every feature recited in Claim 18, and that Claim 18 patentably defines over Bottcher.

New Claim 22 is added by the present amendment. Support for new Claim 22 can be found in the original specification, for example, at page 8, line 8 to page 9, line 7 and in Figures 1 and 2. Thus, it is respectfully submitted that no new matter is added.

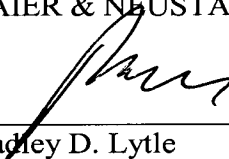
New Claim 22 recites a tubular elastic sleeve extending in a longitudinal direction, including, “a third inner peripheral surface continuous with and between the two second inner peripheral surfaces...and an external semiconductive layer partially over the reinforced insulation layer and having the third outer peripheral surface, wherein the external semiconductive layer is an outermost layer of the sleeve.” Thus, the external semiconductive layer described in Claim 22 only extends *partially* over the reinforced insulation layer and does not cover the entire reinforced insulation layer. Therefore, in view of the above discussion of Bottcher, it is respectfully submitted that Bottcher does not disclose or suggest at least the claimed external semiconductive layer. Thus, it is respectfully submitted that Claim 22 patentably defines over Bottcher.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. A notice of allowance is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Bradley D. Lytle
Attorney of Record
Registration No. 40,073

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)
CBH/rac

Colin B. Harris
Registration No. 58,969